

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LXXVI.

THURSDAY, APRIL 11, 1867.

No. 10.

CONTRIBUTIONS TO DERMATOLOGY.

By SILAS DURKEE, M.D., of Boston.

[Communicated for the Boston Medical and Surgical Journal.]

No. I.—ECZEMA.

A DISCREPANCY of views has recently sprung up among dermatologists with regard to the position which this cutaneous affection should occupy. If its elementary type is selected as our guide, its general claims to be considered a vesicular lesion admits of no rational doubt. It is true that the original pimple, in some very mild cases, does not advance to the size and maturity of a perfect vesicle, as exhibited in ordinary examples of eczema. There is an arrest of development, and the eruption simulates lichen. In such instances, it is usually disseminated sparsely along the dorsal aspect of the forearm, on the neck, chest, &c. To the unaided eye of the observer there is perhaps no evidence that it is anything more or less than a true lichen; whereas, if these doubtful specimens are punctured with the point of a needle or lancet, their watery contents will frequently follow the operation, and thus afford ocular demonstration that the eruption is vesicular. But if they yield no serous fluid, they are only exceptional cases, and do not militate against the views of those who consider a vesicle to be the characteristic mark of the primary lesion of the disease under consideration. Occasionally, eczema is complicated by lichen, and hence we have an eczema lichenoides or lichen eczematodes, in which the characters of the two eruptions are blended together—vesicles and papules.

Eczema usually exhibits three different and well-marked stages in its history. The first is that of erythematous inflammation, more or less severe, with the superaddition of vesicles; the second consists in the formation of thin, yellow, superficial incrustations, formed in consequence of the bursting of the vesicles and the drying up of their contents, which occupy the adjacent excoriated and exudative surfaces; in the third, these incrustations disappear, the inflammatory action subsides, and the affected integument is covered with scales,

VOL. LXXVI.—No. 10

resembling in character those of ordinary healthy epidermis. All these different stages may be present at the same time on the same person—the eruption commencing in one spot, while in another it has passed through its several phases and nearly disappeared.

Without invalidating the above remark with regard to the different stages of the disease, it may be stated in this connection that individual cases occur which show that the period during which vesicles continue to be developed is extremely variable—sometimes lasting only a day or two, while in other instances it is prolonged by the occasional appearance of a few vesicles throughout the whole course of the eruption.

Eczema in Children.

Although this eruption has the same starting points in the very young and in the adult subject, yet its physiognomy in the former differs somewhat from the features which characterize it in the latter. In the infant, its simplest type commences with small, slightly raised vesicles, sometimes closely crowded together and sometimes isolated. In a few hours, these vesicles become more prominent and transparent, and are free from any well-marked inflammation or redness at their base. In four or five days, more or less, they burst, and a discharge of a serous, limpid fluid is poured out upon the adjacent skin. Anon the discharge becomes turbid and less copious; the ruptured vesicles dry up; and, to an observer not entirely familiar with the natural history of the eruption, it might seem that it was at an end. Instances of this kind do occasionally present themselves, but, in a great majority of cases, the malady is of a much more serious and persistent form. Successive crops of vesicles arise; the adjacent integument is inflamed, and the serous exudation desiccates into yellowish laminæ, which adhere closely to the subjacent tissue. The eruption may be quite circumscribed, and occupy but a very limited portion of skin, as, for instance, the summit of the scalp, or about the ears, the face, the arms, the hands or feet; or it may cover the entire surface of the body and limbs, and maintain its hold upon the little sufferer for several months, with repeated alternations of transitory amendment and relapse, whatever remedial measures may be used for its radical and perfect cure. But although with regard to its obstinacy and chronicity it may not be unlike what we meet with in the adult, yet the diseased skin of the infant with this complaint never presents that thickened, hard, cedematous, infiltrated, furfuraceous condition so common in chronic eczema in persons of mature life. The most extraordinary examples of the abnormal features here spoken of are to be found in aged people, especially when the morbid action has implanted itself on the lower limbs. These remarkable transformations of the cutaneous membrane, which every physician must often have seen in individuals of advanced age, are but the ulterior expression of the same diathesis which exists in the infant during the period of lactation, and which manifests its initial presence in a super-

ficial group of acuminate vesicles. The contrast is indeed great, and the medical philosopher finds in it a theme for profound study.

Of all the diseases that invade the human skin, eczema constitutes more than one third; and in children the hairy scalp is its most frequent locality. Perhaps, for all practical purposes, it will be sufficient to consider the eruption under two principal varieties or forms, namely, the acute and the chronic. These terms are easily understood; and, by employing them, all danger of confusion, misapprehension and obscurity of language is avoided. It generally makes its first appearance in the young subject at about the fifth or sixth month, that is, the period of the first dentition; sometimes much earlier. It breaks forth without any premonitory symptoms, except, perhaps, a slight itching of the parts. The vesicles burst about the fourth or fifth day of their evolution, and if the scalp is the part implicated, the hairs become agglutinated; and as the semi-opaque secretion from the ruptured vesicles continues to flow over the surface, which soon becomes inflamed and irritated, soft, small incrustations are produced. There is now considerable heat and redness in the parts. The foetid serosity oozes out almost constantly from beneath the incrustations; and when these are removed the surface is found to be inflamed, and from the open pores, on the site of the ruptured vesicles, the acrid secretions can be plainly seen to escape. The incrustations are reproduced in quick succession. They are irregular in outline, and are sometimes lamellar and imbricated, sometimes thin and soft, sometimes depressed, unequal, smooth, or rugous, and are usually moistened by the viscid secretion to which their formation is due.

Throughout all the active stages of the disease there is violent itching, which is apt to be more intense during the hours usually allotted to sleep than at any other time. The child scratches itself with a vehemence which it is distressing to witness. It forces its nails into the affected skin and tears off the cuticle in every direction; and, as a consequence, it is no uncommon thing to see the blood and serum trickling down along the lacerations thus produced—and for the time being we have no means of appeasing the irritation and suffering.

It is a singular fact that, notwithstanding the severity of the complaint in children, it is seldom that it produces any permanent modification of the normal structure, such as baldness of the scalp, or cicatrices in other portions of the cutaneous integument; whereas, in the adult, it is not uncommon to meet with alopecia, more or less extensive, as one of the consequences of the disease.

It has long been a popular tradition, and many learned practitioners of the present day entertain the opinion, that, if the serous discharge of eczema is suddenly arrested, the brain or some other vital organ will be endangered and the life of the patient sacrificed. Other physicians reject this theory as being entirely fallacious. We

once entertained the latter view of the subject, but as time has given us more extended opportunities for clinical observation, we have found occasion to modify somewhat our former views. If the excrementitious matter of eczema and other exudative eruptions in a young child is profuse, and has continued for some months, and is suddenly arrested, either spontaneously or through remedial measures, the result may be prejudicial to the welfare of the patient; more especially if the scalp is the seat of the eruption. In the adult subject there is little or no danger from a repulsion of the eruption. But with children, in whom a slight disturbing cause is not unfrequently productive of serious mischief, the case is quite otherwise, as clinical facts bear witness. Whoever has had much practical experience in the management of children suffering with the disease under consideration, cannot have failed to observe instances where the exudation has suddenly stopped, and the general condition of the patient has been thereby apparently rendered more uncomfortable and unsatisfactory. Mothers and nurses not unfrequently report that when the eruption has become crustaceous and dries up rapidly, the child seems to lose appetite, is more restless and feverish, and that the normal organic functions are performed with less regularity than when there is a free discharge; and one can hardly resist the conclusion that this discharge seems to act, for the time being, as a safety-valve to the system. The danger produced by the too sudden arrest of the secretion is rendered still more apparent by the fatal cases recorded by different authors. M. Caillault,* an excellent French writer, relates the case of a child two years of age, which suffered for many months from a vesicular eruption "in a very high degree." The health was good, the external aspect, excepting the eruption, was highly satisfactory. Topical applications of the oil of cade were prescribed, with the caution that it should only be applied to a small surface at once, so that the cure might progress gradually. The nurse, in her misplaced zeal, covered with it the whole face and a portion of the scalp. Twenty-four hours after the sudden stoppage of the abundant secretion, the child was attacked with catarrhal pneumonia, so rapid in its progress that nothing could check it. M. Brequet has witnessed an analogous case, in which death supervened from a cerebral affection. Recently there was in one of the wards of the Hospital for Sick Children, under the care of M. Sée, of Paris, a boy six years of age, with a dartsous affection of the face; every time the eruption disappeared, the patient was seized with a violent attack of asthma. Such cases as these are doubtless rare, and we would not by any means attempt to magnify their importance in connection with the subject before us; nevertheless we may find in them, and in other instances of less gravity, sufficient grounds for cautious therapeutic measures in our dealings with the disease in question.

* Diseases of the Skin in Children.

Dr. McCall Anderson says:—"I have rarely witnessed any bad effect even from the rapid removal of the disease. That deleterious effects are occasionally witnessed, however, I am quite prepared to allow."—Page 45.

Burgess, in his "Treatise on Eruptions of the Face, Head and Hands," remarks:—"It should be borne in mind that in children particularly, eczema of the face and head is often a salutary discharge, which it is dangerous to heal suddenly."—Page 33.

There exist in science so many facts of this kind, which have been collected by practitioners of every period, and which, consequently, are above any suspicion of preconceived theory, that it is impossible not to admit the relation of cause and effect between the sudden stoppage of the plastic exudation and the production of various diseases which suddenly appear. Moreover, both physiology and pathology can account for facts of this kind.—M. CAILLAULT, p. 57, 2d English Edition.

It is not difficult to discover in the premises a sort of quasi-physiological function which may not be rudely assailed with impunity; we likewise perceive, as we do in measles, scarlatina, urethritis, parotitis, &c., certain relations of equilibrium and bonds of sympathy between different organs and tissues, which, although not always well understood, we know to exist both in health and disease.

In spite of the best treatment that can be adopted, eczema is exceedingly prone to pass into a chronic state, and to be prolonged for many months or even year after year, with only occasional exemptions from any actual manifestations of its presence. Each season of truce is interpreted by the immediate friends of the child as indicative of the final subsidence of the malady; but not many months pass before there is a renewed attack, and a very remarkable morbid condition ensues.

We will assume now that the eruption has become chronic. The observer notices, at a glance, that it presents a variety of aspects; and the several anatomico-pathological elements which appear simultaneously on different parts of the surface offer no little embarrassment to his judgment, as to the appropriate nosological position in which the eruption should be placed; for, taken as a whole, it consists, so to speak, of a heterogeneous multiform character which seems to be unconformable to any exact and classical nomenclature of the dermatologists. For instance, the physician is called for the first time to see a young child which has had for some weeks a cutaneous eruption, commencing with a small circumscribed blotch of pimples, causing but little disturbance at first, but soon augmenting in size, becoming vesicular, itchy, and yielding an ichorous discharge which irritates the neighboring skin, which in turn takes on a similar action; and thus the local disease spreads in all directions. From the account given by the nurse of the development of the disease, it is evident that its primal type was eczema papulosum; but

it is seldom that eczema presents the simple attributes here enumerated, or that it can be represented by one single term; and accordingly, in the case supposed, the physician finds that different portions of the skin are occupied by eruptions which are seemingly different as elementary lesions; and it is only by patient study of these several existing forms or varieties that any embarrassment or confusion of judgment can be cleared up, and that he can be reconciled to the theory and the fact that each one of the different phases of the eruption in the case before him is to be regarded as a true representative of eczema. They simply constitute the several pathological conditions of the skin arising during the progress of the disease; and they fully justify the appellations which the ablest writers on cutaneous pathology have employed, but which to the general practitioner may sometimes appear superfluous and obscure. But let us look at the supposed case before us more minutely. The eruption is general. Its leading feature in one place is extreme redness. This is a specimen of eczema erythematosum. In another portion of the skin, it is raised into little papules as a leading mark. Here the case is an eczema papulosum. In another part of the skin, vesicles constitute the prominent sign or condition, and we have an example of eczema vesiculosum. In still another region, the exudation may be excessive and constitute a leading feature, and then we have an eczema ichorosum. If pustules are scattered here and there within the precincts of the diseased surface, as is very frequently the case, then eczema pustulosum or impetiginodes is the appropriate name. If the morbid action has continued a long time, and a dry, scaly condition of the epiderm is a chief characteristic, then it is an eczema squamosum. When this last named variety is seated on the scalp, the hairs are frequently enclosed in the glossy, thick, silvery scales throughout their whole length, at the same time forming them into little delicate meshes; and this condition led Alibert to compare it to asbestos, and is described by him under the name of *porrigine amiantacée*. Chronicity is one of its most constant and undesirable attributes. It has sometimes been mistaken for pityriasis, and it is by no means always easy to point out the difference. There is, however, a difference. The scales of the former are thicker than those of the latter. They have always been preceded by a more or less humid condition of the scalp; whereas this is not the case with pityriasis, which is a strictly squamous affection from the beginning. The scales in pityriasis are also thinner, drier, and more adherent than those of eczema.

Eczema squamosum usually appears at a later period of childhood than the other varieties; and is in reality but a sequel of some other form of the eruption which has probably existed for a long time. The different appearances presented by eczema in the course of its development and progress fully justify the names above given to its different forms. They show that the eruption undergoes several

metamorphoses, but does not lose its identity; it is still eczema; and the idea that it has changed its character so as to be called with propriety by any other name, as impetigo, porrigo, tinea, psoriasis or pityriasis, is entirely erroneous. It seems unphilosophical to hold that one disease can be converted into another, and yet Wilson leans to this view.

Some dermatologists make still other varieties of eczema, according as it is partially developed in certain situations; so that we have, for instance, *eczema capitis*, *eczema aurium*, *eczema palpebrarum*, *eczema pudendi*, *eczema perinæ*, *eczema digitorum*, *eczema inguinum*, &c. The foregoing varieties or divisions are appropriate ones, and, by adopting them, we avoid circumlocution. They might be extended still further, but perhaps those already given will suffice.

In some quite severe and obstinate cases, where the child is naturally robust and well cared for, the mucous membrane remains undisturbed; while in other cases the mucous lining of the nose, eyes, mouth, bronchial tubes, and alimentary canal affords unmistakable evidence of participating to a greater or less degree with the cutaneous affection, in the excessive mucous or catarrhal discharges from these parts. The lymphatic cervical and axillary glands are generally swollen, and give rise to chronic adenitis which not unfrequently advances to suppuration. In not a few instances, especially among the poorer classes, where the child is subjected to unfavorable hygienic influences, there is evident mal-assimilation; the patient becomes anæmic, wastes away, the muscles become soft and flabby, and if the patient possesses a pyrogenic diathesis, the deeper portions of the derma are engaged in the morbid processes. A low degree of inflammatory action sets in; and little abscesses form upon some portion of the scalp, about the ears, in the axillæ, and on the hands, fingers, and toes; and the mother is in a state of anxiety, from the groundless apprehension that her offspring is the victim of that much abused malady—the scrofula.

In a majority of cases of infantile eczema, the disease is traceable to hereditary predisposition. It is usually found, upon inquiry, that one or the other of the parents or grandparents has been affected with the complaint. Deficient lactation or bad milk will bring it out. This fact is not unfrequently illustrated where mothers have a deficiency of nourishment for their children, or foolishly insist upon nursing them for too long a time—some sixteen or twenty months. Dentition is sometimes an exciting cause; so also is vaccination; and physicians are thus wrongfully blamed for using impure matter, because as an occasional, but unavoidable sequel to vaccinia an eczematous eruption supervenes, especially in young children with an excessive lymphatic temperament. The eruption in these cases usually commences near the spot where the vaccine virus was inserted; but at other times at a distance, as on the head, nates, and genitals. The most trivial causes that disturb the normal processes

of digestion and assimilation in the young infant are sometimes sufficient to induce the eruption; as, for instance, a chill or a little feverish attack of a day or two, or a sudden fright experienced by the nursing mother.

Mothers and wet nurses, having the care of infants suffering from eczema, often put the question—is it contagious? The attending physician should give a qualified answer. If the eruption, for instance, is on the face or head, and is accompanied for the time being with copious discharge, it is not strange that its irritating qualities should produce a similar eruption on the tender skin of the breast or arm of the nurse in suckling the child; or if she sleeps with it and it nestles up to her, as is usual, she is liable to be affected in like manner. But this liability is to be measured in part, at least, by the susceptibility of the exposed person. Considering the pathological condition of the child, and its relations to the nurse under these circumstances as a source of injury or poison, we are reminded of what may happen when one comes in contact with the poison oak (*Rhus toxicodendron*). In some individuals of peculiarly delicate skin, it is well known that handling the leaves of this shrub will produce itching, inflammation and vesicular eruptions, similar, although not identical with eczema; while other persons alike exposed do not suffer. In the case of the eczematous child, it is certain that it can and does inoculate itself; and the same acrid discharge, when long or often in contact with the skin of a healthy person, may act as an irritant and produce an eruption. Such instances have transpired within our own knowledge; and it is presumed have been observed by the readers of this communication. And yet, in the ordinary sense of the word, eczema is not contagious.

[To be continued.]

SYNOPSIS OF CASES TREATED AT THE SURGICAL CLINIQUE OF
THE BOSTON DISPENSARY, DURING SEPTEMBER,
OCTOBER AND NOVEMBER, 1866.

[Reported for the Boston Medical and Surgical Journal by DAVID W. CHEEVER, M.D.,
one of the Visiting Surgeons.]

THE total number of surgical cases treated during my term of attendance was 1901. Of these there were 400 teeth extractions, leaving the number of surgical cases 1500.

As to the more common diseases, there were—affections of the eye, 80; ulcers, 40; cases of paronychia grava, 22; abscesses, 21; fractures, 18; dislocations, 3; needles extracted, 4; affections of the bursæ, 8; herniæ, 5; several each of enlarged prostate, stricture and retention; and very many cases of phlegmonous erysipelas—making a total of these classes of about 200.

The remaining 1300 cases embraced every variety and grade of minor surgery, and were too numerous to specify.

The average daily attendance was between 30 and 40.

We propose to allude to some of the more interesting cases in detail.

There were six cases of severe alveolar abscess—opening into the nares, on the outside of the cheek, or beneath the chin. In these cases the pus formed at the base of the fang in the alveolar cavity, had bored its way through the alveolus, below the line of reflection of the mucous membrane of the mouth, and had opened externally. Some of these were relieved by extracting stumps of teeth; and one by removing a considerable portion of the alveolar process. Many were aborted, when seen early, by incision or extraction.

Of the eight affections of the *bursæ mucosæ*, three were over the patella, three over the wrist, one in the sheath of the extensor tendons of the hand, and one was developed beneath the tendon of insertion of the semi-tendinosus muscles.

The early cases were cured either by subcutaneous evacuation of the cyst at several points with a needle, and then applying pressure, or by blistering and iodine externally. Two chronic and obstinate cases were cured by setons, inducing suppuration. The bursa beneath the semi-tendinosus was diagnosticated, and proved by puncture with a grooved needle. It had been thought by others to be a periosteal swelling. Its contents were thick, jelly-like synovia. It was about as large as an English walnut, and the patient was an old man. It occasioned him some inconvenience. It is a rare bursa, and does not usually communicate with the knee-joint, as bursal tumors of the ham are apt to do.

One case of loose cartilage of the knee was seen.

Carbuncles, occurring usually in very feeble and underfed subjects, were incised subcutaneously, and under ether, to avoid the hæmorrhage consequent on dividing the skin, and to lessen the shock. It is very possible that local freezing might have answered the same purpose. The sloughs seemed to loosen and escape equally well with those treated, elsewhere, by crucial incisions.

One case of chancre in each corner of the mouth, in a young girl. Several cases of soft chancres existing both around the anus and the labia, but the former probably the result of filth, and extension from the latter. A paraphymosis, reduced by traction, in a boy four years of age. Gonorrhœa in a lad not ten years old. No cases, this year, of vaginal discharges in young children, ascribed to rape, though several in previous terms of service.

The 22 cases of whitlow alluded to were all of the severe and deep variety. Many of them had become palmar abscesses; and one had sinus extending up the forearm, and ended in amputation. The almost incredible obstinacy of the victims of felon in refusing incision until the suppuration has extended up several phalanges and destroyed the bone, continues the same year after year. It certainly is one of the most lamentable results of ignorance about a cura-

ble affection, which affects and impairs the working power of the laboring classes more than any other. Several, threatening deep suppuration, were aborted by early incisions, which relieved tension, and gave exit to more blood than pus. This was particularly the case with phlegmons arising from pricks of fasciæ. A number of felons were opened while chilled by ether or by rhigolene. The latter freezes much quicker and deeper. Pain was annulled when the knife entered; but it seemed to us that the pain of reaction was much more severe than when nothing was used.

We have observed, in connection with the phenomena of fainting after minor surgical operations here, that the patient often goes through a slight epileptiform convulsion before becoming unconscious. This is apparently due to anæmia of the brain. Whether or not this is the precursory state of the brain in true epilepsy, before a convulsion, we are unable to say.

Rhigolene was used a number of times in extracting teeth, with success when the tooth was favorable to extraction at the first moment, but not otherwise.

Of the 18 fractures, there were several of interest. One case, in a child, of apparent separation of the upper epiphysis of the radius from the shaft. Another, in an infant, of evident separation of the lower epiphysis of the radius, simulating Colles's fracture. Both these got good results from treatment.

Partial, or "green-stick," and sub-periosteal fractures of the forearm. Three fractures of the condyles of the humerus. In two, treated in the country, rupture of the external lateral ligament, tilting of the broken condyle outwards, and apparent dislocation of the forearm inwards, on extension. These latter derived no benefit from treatment.

There was one case, in a child, of spontaneous, or natural cure of a fracture of the clavicle, without apparatus, and without confining the arm. It was not known what was the matter with the child until brought to the Dispensary for diagnosis. There was but slight deformity, and a moderate callus; these were enough to verify a fracture, but no more than we often see as the result of treatment. All the fractures of the clavicle were treated by Velpeau's bandage, with the hand raised to the opposite shoulder, and the arm bound to the side in an "*appareil immobile*." Until this was used, no apparatus could be kept on these children, often young, and always poor and neglected.

We have used, with much satisfaction, the glue bandage of Mr. Morgan. It is made with common boiled glue, to which one fifth part alcohol is added, to keep it. It is applied to the bandage with a brush. It is firmer than starch, dries very quickly, admits of being slit up and having eyelets inserted, and is both cheaper and of easier application to Dispensary patients than the ordinary starch bandage.

Cases of onychia maligna are common among children at the Dispensary. It is a very obstinate affection, and we have several times amputated the last phalanx to relieve a child worn down by weeks of irritable ulceration at the root of the nail. The past season, we attempted to dissect out, under ether, the matrix of the nail, but ineffectually. Although we went both far back and deep with our incisions, the nail began to grow and ulcerate again in each corner. It was now treated with nitric acid, as recommended by Mr. Annandale, but without much benefit.

A young woman presented herself with a singular paralysis following a fall upon the occiput, several weeks before. There was no lesion upon the head. There was paralysis of the levator palpebræ and external rectus of the *right* eye, with an impairment of quick contraction of the iris. Also, paralysis of the *left* facial and *left* hypoglossal nerves. No other paralysis whatever. When last seen, she was improving very slowly. It seems probable that an effusion took place about the pons Varolii, affecting the origins of some nerves on one side and some on the other. The serum was absorbed quickly; but the clots of the extravasation remain, to be absorbed much more slowly.

There was one case of abscess in the ischio-rectal fossa, in a young man, which healed without fistula or urinary trouble, after an early and free opening.

A wretched infant of eight months was brought with prolapse of the rectum, following diarrhoea and whooping cough. This prolapse was of the third, or worst variety described by Mr. Cooper Forster. The rectum protruded several inches constantly; and, when returned, fell down at once, without any power of retention by the sphincter. We concluded, at once, that nothing could be effected without a mechanical support. One was contrived, as follows:—A waist-belt, supported by shoulder-straps of elastic, had, descending from its middle, behind, a spring, like a truss-spring, which curved forwards under the perinæum. To this spring was attached a wooden ring, which pressed upon the margins of the anus. Two elastic perineal straps held it always in place. This was not taken off during defæcation, that being the time when protrusion of the bowel would occur, but kept on constantly, the feces passing through the ring. The rectum was allowed to protrude every two days, and was painted with perchloride of iron. Relief was immediate and permanent. The apparatus was left off at the end of four weeks. It had occasioned no excoriation.

A case of small, rodent ulcer, of a year's duration, was healed after applying nitric acid fortior.

One case, tapped for hydrocele, gave exit to eight ounces of cloudy, whitish fluid, full of spermatozoa.

Hydrocele in children was readily absorbed by the external use of iodine.

THE PATHOLOGICAL PHYSIOLOGY OF THE BRAIN IN CHOLERA.

By Dr. E. MESNET, Paris.

[Translated for the Boston Medical and Surgical Journal by THEODORE W. FISHER, M.D., Boston.]

DURING the last epidemic of cholera, through which we have just passed, I have had under observation many cases, the study of which has induced me to assign an important part to the nervous system in the evolution of this terrible disease.

If cholera has remained heretofore unknown in its nature and essence, we have at least clinically established the sad effects which are its invariable characteristics, viz., depression and exhaustion. All the organic functions are in turn attacked, and the patient passes with rapid steps towards collapse and death, unless reaction appears. It is not in external appearances of strength that we ought to seek the measure of resistance to this progress, but rather in the coöperation of those intimate and radical functions of the ganglionic nervous system. With some, the reaction is promptly and energetically established; others remain weak for a long time. The former regain lost ground easily, and are able to ascend the declivity on which their steps have been arrested; the latter succumb without an effort, or die of complications of which cerebral accidents form a large proportion.

Cholera is, then, a disease of two aspects and two periods, opposite and distinct—one of prostration, the other of reaction; both full of peril, and nearly alike as to mortality. To the first belong functional derangements of nervous ganglionic life; in the second occur those cerebral complications to which we wish for a moment to call attention.

Sometimes simple, sometimes modified in character by special idiosyncrasy, or by former habits, which impress on its course particular tendencies, the reaction is so much the better as the functions are reëstablished equably, without undue haste, and with a return of the secretions and exhalations, and as there is awakened in the patient a feeling of hope in proportion to the change in his symptoms. Whenever this has been the case, we have seen our patient leap, as it were, from sickness to health, five or six days sufficing for complete recovery. But the period of reaction, aside from serious complications, at times presented us with isolated phenomena, whose causes ought not to escape notice. There were persons surprised, as it were, by the epidemic while in a moderate state of alcoholic intoxication, who would have had no cerebral trouble had their health not been suddenly affected; but, when seized by cholera and exhausted by vomiting, purging, and low diet, the alcohol was enabled to take effect through the debility of the system.

With three of these cases, we were able from the outset to verify a train of symptoms nearly resembling an inflammatory condition. One of them, attacked five days before, presented himself on the

sixth day, with a hot skin, perspiring profusely, the pulse at 108, the expression animated, &c. He had only had the vomiting, purging and cramps of cholera, with no coldness or lividity. About the tenth day his mind, previously intact, was in turn affected; it was not the sluggish perception of the cold stage. There was, on the contrary, loquacity, incoherence of ideas, and soon after hallucinations of sight, which became exaggerated during the night, but showed a tendency to disappear in the morning. Under their influence, he arose and attempted to leave the ward, neither knowing what he did or where he was, his hands trembling, his steps uncertain, his look bewildered. This condition lasted three days, after which convalescence began.

This was really an attack of delirium tremens, such as often occurs during pneumonia. In two other cases, where the termination was no less favorable, the same accidents were developed under the same influence, and in all three the reaction gave evidence of the effects of alcohol. It should be remembered that we did not have to deal with those whose constitutions were exhausted by excesses; they were all vigorous young men, and far from being in a state of cachexia. They even found in the use of alcohol the cause of a hasty reaction.

What we have said, however, does not invalidate the opinion of many authors, and confirmed by experience, that persons in a state of alcoholic cachexia are as quickly and as severely attacked as those enfeebled by any other form of cachexia.

In connection with this group of patients, sustained, as it were, under the depressing influence of the epidemic, let us examine the cerebral state of patients more severely affected. It is sufficient to have examined one such case to be struck with the discord which exists between the nervous functions of animal life and of the life of relation. I know of nothing more touching than the aspect of the stage of collapse, when the patient is continually agitated, his features and skin corpse-like, all visceral action and every organic function apparently extinct, yet preserving his intelligence, and perhaps conversing with you at the last moment. There is no vivacity, his ideas are slow, his memory needs prompting; but his attention gained, one obtains precise information and correct responses. This state is not the coma of cerebral diseases, but a kind of dulness which results from the general exhaustion of organic life. The benumbed senses also play a part in the torpor of the cerebral acts; less sensitive to external excitants, they transmit imperfect impressions, followed by obscure sensations—the hearing is dull, the sight feeble, the general sensibility obtuse.

When the cold stage is modified by approaching reaction, the intellectual faculties lose this dulness. The patient, who has now a clearer sense of his condition, keeps an unquiet eye on all which transpires.

There is no doubt that the commission charged with considering what special care is required by cholera patients, took into account the actual condition of a man lying in a cholera ward, at the moment his mind becomes active. They should have considered his surroundings. What must be the effect on such a patient who sees around him the dead and the dying? Would not the cries and complaints of his neighbors have the most deplorable influence? Would not his courage be shaken, when everything should tend to sustain it? These important questions ought not to have been passed over in silence; besides, the moment the theory of contagion was adopted, classification became necessary. As for myself, accustomed to the study of the influence of the moral on the physical state, and a witness every day to their intimate relations, I have not ceased during the whole epidemic to consider all these questions with great care. Thanks to the convenient arrangements at the Hospital St. Antoine, I have been able to classify my patients according to the stage and degree of their disease, and thus to avoid in a great measure this bad influence. Of the two wards St. Etienne and St. Eloi, entirely separated, the first was exclusively devoted to new cases, while the second was continually occupied by convalescents, or those in whom recovery could be foreseen. Our frequent visits, and attentive examination of each case, morning and evening, enabling us to follow, step by step, the rapid changes of the disease, reduced the sad effects of the want of classification to almost nothing.

I will go still farther, for I believe that the different objects of these two wards, well known to our patients, has served as a stimulus, if not to hasten, at least to keep the reaction in view. As soon as improvement has begun, we have seen them demand to be removed to the convalescent ward, and experience great satisfaction in the promise of it. This desire and the hope of change, opportunely held out, have been powerful aids, which we have used as much as possible to re-awaken the action of those salutary influences which cholera tends to destroy by its depressing nature. The death of two of our patients has seemed to us directly owing to the unhappy moral conditions produced, in one case, by the repeated visits of unfriendly acquaintances, and in the other by the discouragement and demoralization expressed by these words, "*I am lost!*" which he repeated continually.

The functions of the brain, which we have just seen preserved in the midst of the dangers of collapse, may be compromised during the period of reaction, and become, in turn, symptomatic of dangerous pathological conditions. Six of our patients were attacked on the fourth or fifth day of the reaction with symptoms of meningitis. Four of them died and two recovered, but it should be observed that in the last two cases it did not reach its full development. After the application of leeches to the mastoid processes and the use of saline cathartics, the reaction resumed its regular course.

The four cases where death ensued had not been originally severe; reaction was easily and moderately established, and was progressing favorably, when suddenly it became irregular and vacillating. The patient complained of headache, the eyes were brilliant, conjunctiva injected, mouth dry, and soon a noisy delirium, with restlessness, followed. These inflammatory symptoms, together with floccitation, subsultus tendinum, contraction and irregularity of the pupils, at times trismus, and all the time stiffness of the neck and drawing back of the head, had been common to all four.

In two of the cases, there existed from their entrance an anomalous symptom, which testified to a disturbance of the nervous system, already profound. This was complete anæsthesia of the whole surface of the body. This disorder of the peripheral sensibility, which was peculiar to these two cases, and which seemed to be an isolated fact, not in accordance with the other symptoms, early fixed our attention on the possibility of other accidents to the nervous system. It was towards the fourth day of a good and regular reaction that meningitis occurred.

[To be continued.]

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, APRIL 11, 1867.

THE MULTIPLICATION OF MEDICAL SCHOOLS.

In our last week's editorial we incidentally alluded to this subject, and are tempted to recur to it. During the present session of our State Legislature two new medical schools have been incorporated, and the question naturally presents itself, whether such an increase in the provision for medical education is called for by any existing necessity. Any one running his eye over the long list of similar institutions distributed all over the United States, must feel that the burden of proof as to the existence of such a necessity ought to rest upon those who ask for an addition to their number. We well remember the astonishment with which, in answer to an inquiry made to us a few years since in Vienna by a Hungarian physician, as to the number of medical schools in the United States, our reply that there was "at least one to every State, and in some there were two or even more," was received. "Why," said he, "in the whole Austrian Empire we have but three!" Our national pride did not permit us to weigh the comparative merits of the schools of the two countries; and for aught he learned from us, each one of our numerous lecturing establishments might claim equality with the world-renowned School of Vienna.

But really this is a serious evil—this readiness of our State Legislatures to give the authority to create doctors of medicine to any decent body of petitioners or any incorporated literary institution. It is one of the fruits, no doubt, of our free government, but one which does little credit to the wisdom or enlighten-

ment of our legislators. Far from being an evidence of intelligence and culture, it is a proof of ignorance and narrowness. It comes from a want of knowledge of what a proper school of medicine should be, and a desire, doubtless often well meant, but too frequently most paltry and timorous, to avoid the charge of sustaining monopolies. Thus it has come to pass, that at the very moment when a vigorous effort is being made by the American Medical Association to raise the standard of professional education throughout the land, to require a more thorough literary training before admission to the medical schools, to establish a more uniform system of tuition throughout the States, and thus to create a body of enlightened, thoroughly trained and competent men for the responsible office of guardians of the public health, these efforts are constantly antagonized by the creation of new establishments by our State authorities for the manufacture of medical diplomas, which, for all that the community knows, are just as good a warrant for their confidence and honor as those conferred by the ablest faculty in the land.

If we are rightly informed, the existing medical schools of Massachusetts did not think it advisable, while the question was pending, to offer any direct opposition to the movement of which we have been speaking. We suppose that in adopting this course they were actuated by the feeling that any such opposition would be useless and would recoil upon them to their disadvantage. Very likely this might have been the case; but we are sorry that some effort was not made to enlighten our law-givers as to what a medical school ought to be, and the capabilities of those already existing.

It is an axiom with the medical profession, that no medical school is worthy of the name or should have the right to confer the degree of doctor of medicine, which has not at its command clinical advantages. And yet at this moment the institution of this class which counts the largest number of pupils in this country, is said to be absolutely wanting in this important department. Think of a man's being licensed to undertake the responsible charge of a case of pneumonia or pericarditis with only a book and lecture knowledge of auscultation! It is bad enough for a graduate of medicine to be entirely unacquainted with the physiology of many of the commonest cases of infantile disease, such as the exanthemata for instance, as is too often the case—but to be absolutely unacquainted with the interior of a hospital, as we are informed a graduate of the institution we have referred to may be, is an abomination indeed.

We admit that it is a difficult thing to draw the line between an unjust favoritism to existing schools, and a ruinous competition by throwing down the barriers and letting in the whole world to a general scramble for the rights and honors of the doctorate. But, difficult as it may be, it is not impossible; and it is time that those of our profession who have worked hard for and feel some pride in the degree which they append to their names, should make an earnest effort, through the American Medical Association or by outspoken remonstrance and energetic action in their own immediate circles, to stay the progress of the flood which threatens to sweep away everything connected with it which makes it worth having.

Our Catarrhal Holiday.—This is the time to consider, before it is too late, whether we desire to see those misguided *paper wreaths and blue noses* whistling in the inclement blasts of Boston Common on the first of May; a day of conventional and inhuman enjoyment, on which, as Sydney Smith would have

said, A decided that B shall agree to enjoy seeing the child C shivering in a white cotton frock and paper flowers. Dr. Jarvis would do good service by collecting statistics of the colds, catarrhs, coughs and diphtherias thus engendered. We now, and here, earnestly advocate the substitution of the fifteenth of May for the present imported holiday, which belongs to an earlier spring than ours. We speak also in behalf of the annual crop of enthusiastic but inexperienced couples who visit the suburbs in fruitless pursuit of flowers, which are wise enough to stay in their beds till warmer weather.

Syrup of Lime in Acute Rheumatism.—Want of space in last week's JOURNAL compelled us to defer a word or two which we wished to append to Dr. Buckingham's communication. We have found great difficulty in getting a properly prepared article in answer to our prescriptions. The difficulty seems to have been, that apothecaries have failed to use *boiling* water in its preparation. Any temperature short of boiling is insufficient, and surely leads to failure. Dr. Buckingham has taken the most effectual method to secure a thorough trial of the new remedy. We learn that he has treated a dozen cases of acute rheumatism during the present season, with syrup of lime alone, and that the average duration of the disease has been ten days. In no instance did he give a single opiate. So many remedies have been vaunted in times past as having special power in this disease, that we are not, nor do we understand Dr. Buckingham to be, oversanguine with regard to this. His special purpose at the present time is to secure, if possible, a widely extended trial of it. We should be glad to publish in this JOURNAL the results of the experience of any gentleman with this remedy which he may be pleased to communicate to us.

A Society of Experimental Therapeutics has recently been created in France, of which the leading members are Professor Trousseau, Dr. Pidoux, Dr. Guéneau de Mussy, Dr. Gubler, Dr. Herard, &c. The chief purpose of the Society is to ascertain, through experiments on living animals, the real properties of active drugs, which clinical observations on the human subject cannot always determine with a sufficient degree of scientific accuracy. Some interesting communications, by Dr. Moreau, the physiologist, on the action of belladonna, were discussed at the first meeting.

Faculty of Medicine of Paris.—By Imperial decree the following professors have just been appointed:—MM. Lasègue, Pathology and General Therapeutics; Vulpian, Pathological Anatomy; Sée, Therapeutics and Materia Medica; Broca, External Pathology; Axenfeld, Internal Pathology; Hardy, Internal Pathology. It is said that Professor Nelaton is about resigning the chair of Clinical Surgery.

Jubilee of Professor Hebra.—Professor Hebra, doubtless the most distinguished teacher of dermatology that has ever lived, having recently completed twenty-five years of instruction in this department (as we learn from the *London Medical Times and Gazette*), it was determined by his past and present pupils to give him an ovation. On the Professor's entering the lecture-room "he was received with loud cheers by a crowded auditory, and his assistant, Dr. Kohn, delivered

an oration, setting forth in emphatic terms how much dermatology stood indebted to his labors, and presented him an address enclosed in a luxurious and artistic envelope." In reply, the Professor reviewed the recent progress of his favorite science, and dwelt upon the stimulus he had derived from the critical and creative mind of Professor Skoda. In the evening, a more limited number of Professor Hebra's admirers honored him with a banquet.

Influence of Hygienic Measures on Public Health. Algeria.—The eminent English hygienist, Dr. John Sutherland, in a letter to Dr. Edward Jarvis, of Dorchester, writes as follows:—

"I have had two reasons for delaying writing. First, I was sent into Algeria and across the country as far as the Sahara, to examine, with my colleagues, into the causes of the reduced death-rate in the French army. Since then, I have been several times in Spain, and at Gibraltar, with reference to the epidemic cholera; and I expect to have to go, very shortly, up the Mediterranean on a similar work.

"The French experience is very startling, both as regards the causes of high death-rates in Algeria and as to the means of reducing them. You will see what they are when I send you the report. There is nothing new, at least theoretically. They have arrived at the results simply in the way of forced experience, and in this road they have reduced the army death-rate from 80 to 13 per 1000. Among the civil population, also, the reduction has been from 10 to 2½ and 3 per cent.

"There are many parts of America in which the local conditions must be very much the same as in Algeria, and it would be a very interesting subject if the progressive reduction of your death-rates, as agriculture and drainage advanced in the semi-tropical regions, could be brought out. Perhaps this has been done officially. If not, it would be very important that it should be done.

"In Algeria, the experience stands thus:—Create a village on a flat, undrainable plain, and begin to turn up the ground for cultivation; your death-rate will be 10 per cent. Year after year, however, as the culture progresses and successive crops are taken, the death-rate will fall until it reaches the normal rate. In some of the most pestiferous districts in the world, the population is now as healthy and red faced as in England, and this has been done by agriculture and drainage, chiefly.

"They find that the earlier years of culture are always the most fatal to life, but that the death-rate can be kept down by various precautions, the most important of which consists in living and sleeping away from the work."

Clitoridectomy for the Cure of Epilepsy.—In connection with this subject, which we noticed two weeks since, the following extract from a lecture by Dr. Brown-Séquard, published in the London *Lancet* of January, 1866, is worthy of much consideration:—

"An able surgeon has lately treated several kinds of functional nervous affections by extirpation of the clitoris. That this operation may sometimes be useful there is no doubt at all. But I cannot look upon this mode of treatment as one that should be employed in other cases than those in which a distinct aura starts from the clitoris, or in those cases in which that organ is morbidly sensitive and much hypertrophied. There are cases of nervous complaints, due to masturbation, in which the clitoris has been extirpated without any durable benefit as regards the nervous affection, or even as regards the masturbation. In women, as well as in men, the only decisive means against masturbation is the production of a small ulcer (by caustics or the red iron) on parts of the genital organs that are unavoidably touched or moved in the act of self-abuse, so that

every attempt to accomplish the act, either with or without the help of the hand, is so painful that the patient must give it up."

We would add to the above that Mr. Baker Brown and his associate, Mr. Philip Hardy, as appears by a note published in the *London Medical Times and Gazette*, have determined not to perform the operation of clitoridectomy in the London Surgical Home, "pending the professional inquiry into its validity as a scientific and justifiable operation."

The Endoscope. Illumination by means of the Magnesium Light.—Prof. E. Andrews, of Chicago, has employed the magnesium light to great advantage in the use of the endoscope for examining the urethra. In a communication to the *Chicago Medical Examiner*, he says:—

"The result was to illuminate the urethra magnificently. The mucous membrane, with every little fold or patch of varied color, was as plainly in view as could possibly be desired. It could not have been seen any better, had it been dissected and laid in the sunlight. By gradually withdrawing the tube, the whole of the canal may successively be seen as it collapses across the end of the tube. Seeing the performance of this illumination, I have ordered a spring and some small wheel-work attached to the lamp, so that the wire may be made to advance into the flame without the help of an assistant. In this way, no doubt, the difficulty of the illumination will be fully overcome, and the urethra can be inspected almost as easily, and quite as perfectly, as the tongue."

Singular Parasite.—Dr. Ernst Schmidt exhibited to the Chicago Medical Society a specimen of a very unusual parasitic worm, with the following history:—An American girl, 10 years of age, weakly, and of scrofulous diathesis, had suffered for some time from capricious appetite and pain in the upper portion of the abdomen. Two weeks ago, she complained of pain in the left shoulder; at the seat of pain there soon appeared a slight elevation, tender to the touch, slightly red, from which, in a short time, a small worm was observed, endeavoring to escape. If disturbed, the worm withdrew its head beneath the skin; by gentle pressure, however, it was forced through the small opening it had made. A similar swelling appeared behind the left ear, from which another worm made its escape. Thus far, eight elevations have appeared in different portions of the body, from which five worms have been secured. Some of these elevations were neither red nor very tender on pressure. Palpation gave the sensation of a foreign body under the skin. The efforts of the worms to pass through the skin caused no pain nor hæmorrhage. The small opening closed readily, and the elevation soon subsided.

The child, during this time, was nervous and irritable, the pulse being, at times, as low as 40 per minute. The application of mercurial ointment caused the elevations to disappear. In all cases where this was applied, the worms seemed to pass upward from their original position towards the head. The child was not in the habit of eating either raw meat or vegetables. There were no indications of other parasitic worms in the child or other members of the family.

The worms were about five eighths of an inch in length, quite transparent, and divided into eight sections, with an alimentary canal running nearly straight from the anterior to the posterior extremity. The mouth, as examined with the microscope, presented no evidences of apparatus for suction or boring.—*Chicago Medical Journal*.

Chicago Medical Journal—Change of Editors.—Drs. Holmes, Lyman and Larkey having resigned the Editorship of the *Chicago Medical Journal*, Dr. J. Adams Allen has resumed the editorial charge, which he relinquished three years since.

Death of Dr. Scoresby Jackson.—The death of Dr. Scoresby Jackson, author of the well-known work on Climate, and a Manual of Materia Medica, occurred in Edinburgh, on the 1st of February, of typhoid fever, at the age of 32.

Dr. Alexander J. Sutherland, the eminent alienist, died at Brighton, England, January 31st, in the 57th year of his age.

Dr. William Brinton, author of the celebrated work on Diseases of the Stomach, died in London, January 17th, from disease of the kidney.

THERE were 92 deaths in Providence during the month of March, which number was 16 more than in the preceding month; 10 more than in March, 1866, and 7 more than the average for March during the last twelve years. There was not a single death in March from smallpox, scarlatina or diphtheria, and the mortality from all diseases of a zymotic character was less than ten per cent. of the whole number. The increase of mortality was chiefly from consumption, old age, and pneumonia, and was undoubtedly caused, to some extent at least, by the cold, disagreeable weather which prevailed during the month.

VITAL STATISTICS OF BOSTON.
FOR THE WEEK ENDING SATURDAY, APRIL 6th, 1867.
DEATHS.

	Males.	Females.	Total.
Deaths during the week	44	40	84
Ave. mortality of corresponding weeks for ten years, 1856—1866	42.6	41.1	83.7
Average corrected to increased population	00	00	92.4
Deaths of persons above 90	0	0	0

JOURNALS AND PAMPHLETS RECEIVED.—Medical Record, Nos. 26 and 27.—New York Medical Journal for March.—Medical and Surgical Reporter, Vol. xvi., Nos. 9-13.—American Journal of Medical Sciences for April.—Medical News and Library for March and April.—Chicago Medical Journal for March.—Chicago Medical Examiner for March and April.—Cincinnati Lancet and Observer for March.—Medical Reporter, Vol. ii., Nos. 1 and 2.—Nashville Journal of Medicine and Surgery for March.—Southern Journal of the Medical Sciences for February.—Southern Medical and Surgical Journal for March.—New Orleans Medical and Surgical Journal for March.—Pacific Medical and Surgical Journal for February.—Canada Medical Journal for February.—L'Union Médicale, Nos. 22-26.—London Lancet (reprint) for March.—American Journal of Pharmacy for March.—Detroit Review of Medicine and Pharmacy for March.—Druggists' Circular for March.—Dental Cosmos for March.—Biographical Memoir of Franklin Bache, M.D.—Accidental and Congenital Atresia Vaginae, with a Mode of operating for successfully establishing the Canal. By Thomas Addis Emmett, M.D.—American Eclectic Medical Review for March.—University Journal of Medicine and Surgery, No. 11-13.—United States Medical and Surgical Journal for April.—Herald of Health for April.—Hall's Journal of Health for April.—Phrenological Journal for April.

COMMUNICATIONS RECEIVED.—Two Cases of aggravated Strabismus of twenty-five years' standing; relieved by Operation. By Hasket Derby, M.D.—Extracts from the Records of the Providence Medical Association.—Surgical Cases in the Massachusetts General Hospital, occurring in the Service of Dr. Henry G. Clark.—Copy of the report of a Case of Lithotomy, from the Boston Weekly News-Letter, November 13, 1741. By Samuel A. Green, M.D.

MARRIED.—In this city, 4th inst., J. W. Odell, M.D., of North Hampton, N.H., to Mrs. Martha E. Elliott, of Newton, Mass.

DEATHS IN BOSTON for the week ending Saturday noon, April 6th, 84. Males, 44—Females, 40. Accident, 2—apoplexy, 2—congestion of the brain, 2—disease of the brain, 3—inflammation of the brain, 1—bronchitis, 3—cancer, 3—consumption, 15—convulsions, 4—cystitis, 1—diarrhoea, 1—dropsy of the brain, 2—irritative fever, 1—scarlet fever, 4—typhoid fever, 3—fistula, 1—gastritis, 1—disease of the heart, 2—intemperance, 1—disease of the liver, 1—congestion of the lungs, 1—inflammation of the lungs, 7—œdema of the lungs, 1—old age, 1—premature birth, 1—scrofula, 1—smallpox, 6—thrush, 1—unknown, 9—whooping cough, 1.

Under 5 years of age, 25—between 5 and 20 years, 8—between 20 and 40 years, 31—between 40 and 60 years, 8—above 60 years, 12. Born in the United States, 50—Ireland, 24—other places, 10.